

Today's Plan:

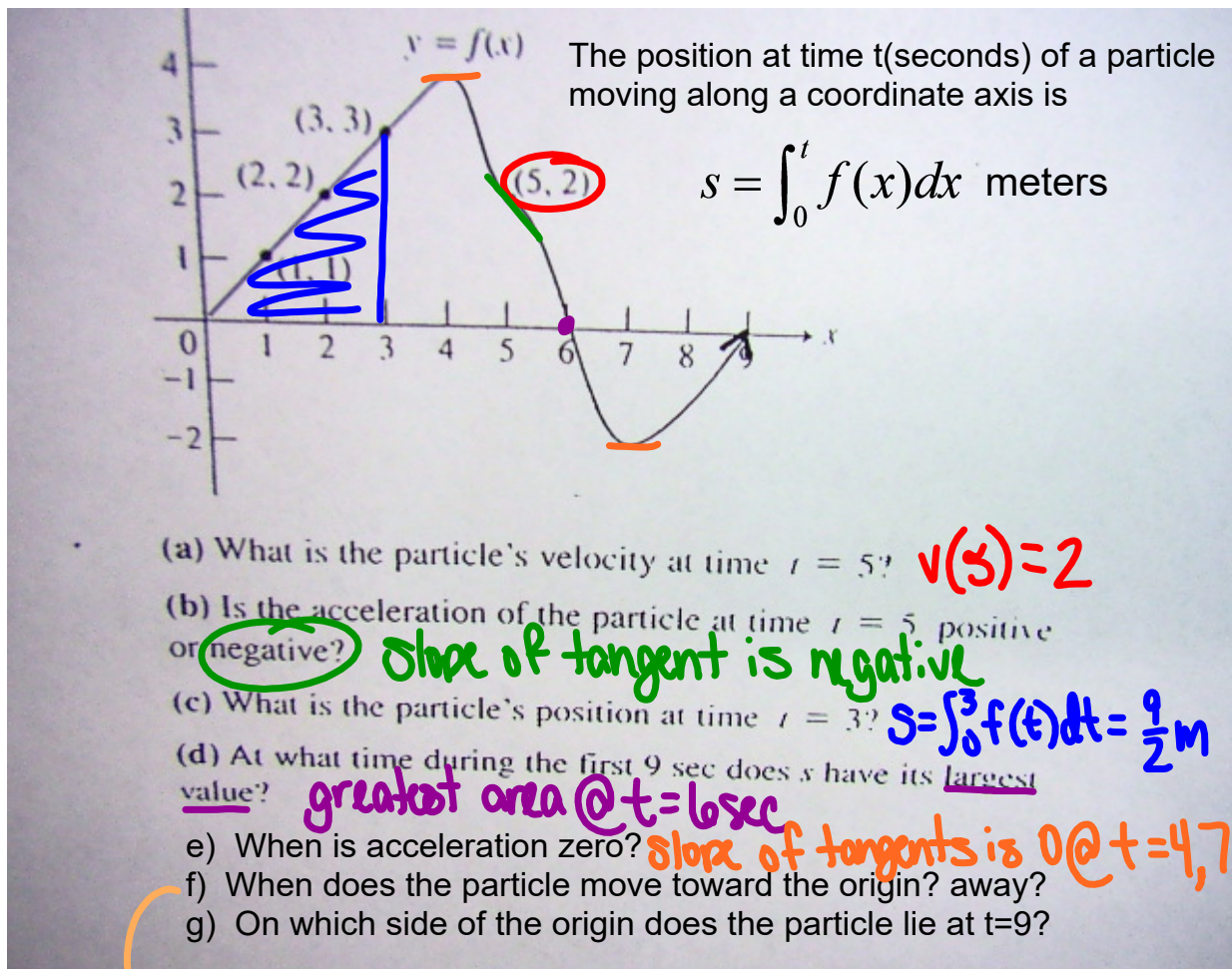
Learning Target (standard): I will find the area of a region. I will use the area of the region to describe other quantities.

Students will: Complete practice problems over previous concepts at the boards and take a quiz on area of regions.

Teacher will: Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide quiz problems.

Assessment: Board work, homework check and quiz

Differentiation: Students will work at the board, go over and correct homework at their seats, and actively engage in quiz problems.



- (a) What is the particle's velocity at time $t = 5$? $v(s) = 2$
- (b) Is the acceleration of the particle at time $t = 5$ positive or negative? negative slope of tangent is negative
- (c) What is the particle's position at time $t = 3$? $s = \int_0^3 f(t) dt = \frac{9}{2} m$
- (d) At what time during the first 9 sec does s have its largest value? greatest area @ $t = 6$ sec
- e) When is acceleration zero? slope of tangents is 0 @ $t = 4, 7$ sec
- f) When does the particle move toward the origin? away?
- g) On which side of the origin does the particle lie at $t = 9$?

f) away - area gets larger
 $0 < t < 6$

toward - area gets smaller
 $6 < t < 9$

g) positive side - more positive area than negative area